

THE SECRET OF SEASICKNESS AND HOW TO PREVENT IT.

JUST what are the physical causes of seasickness is here intelligently explained. The article is accompanied by a diagram which shows at a glance the origin of the trouble. It is directly traceable to the pneumogastric nerve, which is an extremely sensitive organ of the nervous system; so sensitive, in fact, that it is disturbed and aggravated by the mere proximity to motion. It has four different ways of asserting its distress, all of which develop into seasickness of a very exasperating kind. Dr. Franklyn Sylvester, attending physician of the Columbus Hospital, herewith presents a lucid explanation of the causes of this dreaded malady:

THE FOUR CAUSES OF SEASICKNESS.

By Franklyn Sylvester, M. D.



To the Editor of the Journal:

There is in our nervous organism a nerve known as the pneumogastric nerve, whose only function is to make trouble for human beings. Its particular function is to bring about seasickness, which it succeeds in doing in the slightest provocation.

Let us begin at the brain, where the pneumogastric nerve has one of its tantalizing ends. The other is in the stomach. Now, the brain is movable; therefore less liable to injury through concussion. The stomach contains muscles that are partly under the control of the will. These semi-voluntary muscles are very largely controlled by the pneumogastric nerve, which has the faculty of becoming irritated at both ends. The spinal cord and the spine are affected by this nerve when it becomes belligerent.

Therefore, there are four different ways that one can generate a very distressing seasickness: 1. Through the brain, by way of the pneumogastric nerve. 2. Through the brain, by way of the spinal cord. 3. Through the spinal cord direct to the stomach by the pneumogastric nerve, and 4. back again. They are all primarily due to the unusual movements of this nerve, which create a congestion of the blood in the small blood vessels.

Some people become "seasick" from riding backward in a railway car, which is an unusual motion. Others are affected merely by the sight of motion, and the blood,

ONLY WOMAN WHO EVER LIFTED A ROARING LION.



MME. PARA MORET AND THE MIGHTY LION.

It takes something marvellous to make a vaudeville sensation in Paris. But that is what Mme. Para Moret is doing by her lion-lifting act.

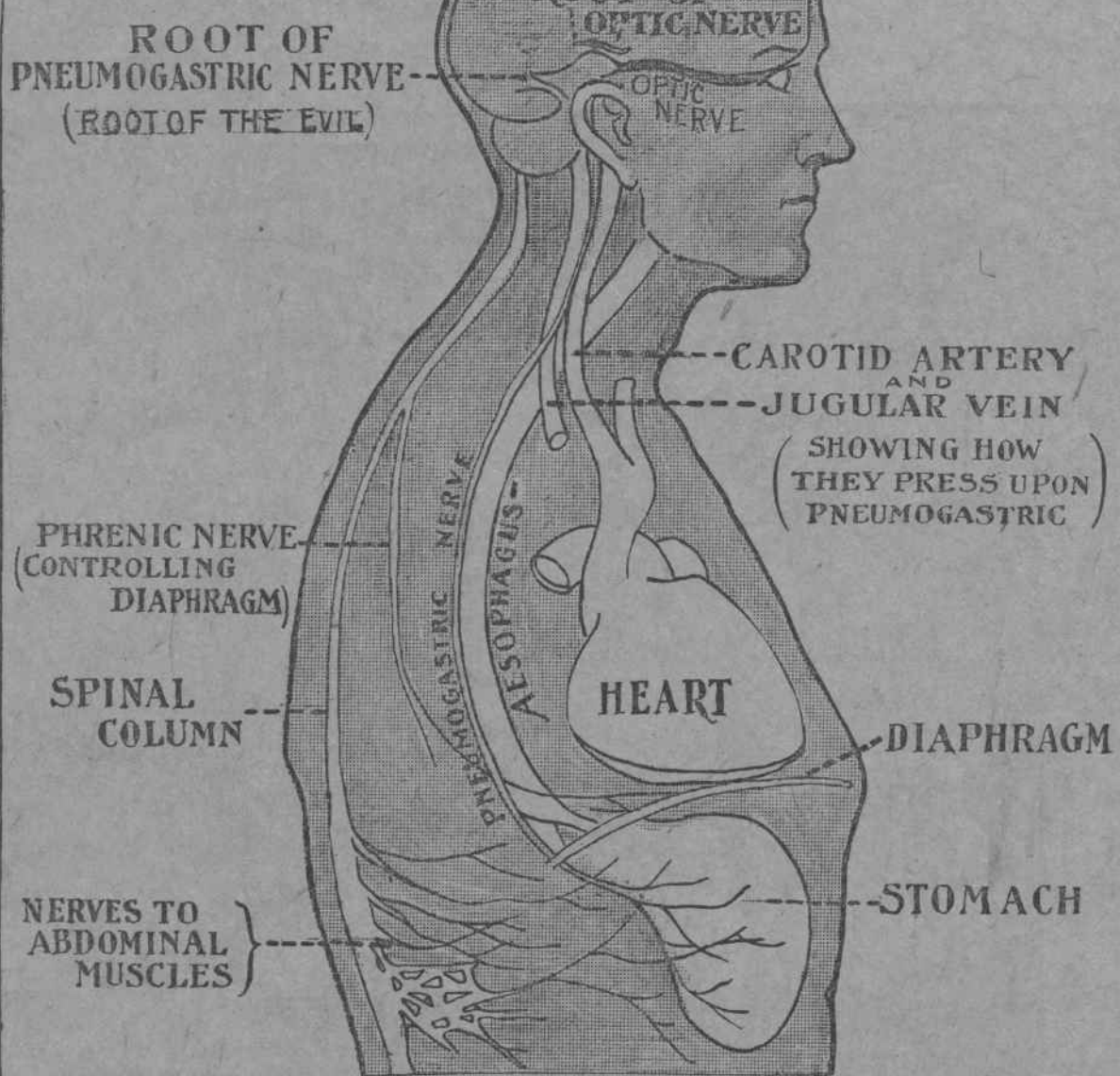
With wonderful courage she picks up a shaggy roaring monster and throw him across her shoulder with as much abandon as a hunter bears off a deer.

It was fierce competition in the lion-raising line that prompted Mme. Moret to adopt this particular feat.

Another lady lion-trainer had proved a big drawing card by lifting a lioness weighing over one hundred pounds.

Mme. Moret at once determined to outdo this. She began lifting small lions, and kept up her practice until she is now able to pick up and carry upon her shoulders one of the largest of the king of beasts to be found in France.

She has been photographed in this act and a copy of it is here reproduced.



The Sensitive Nerves of the Body that Are the Direct Routes of Seasickness.

THE PRINCE OF WALES'S INJURED KNEE AS IT LOOKS CAGED IN STEEL RODS.

London, Sept. 3. THE PRINCE OF WALES'S accident resulting in the fracture of the bones of the knee nearly two months ago has brought out some unique devices in surgical treatment.

A mechanism with hidden springs has been attached to his leg that will soon allow him to move about with a natural gait without moving a muscle of the injured lower limb.

The Prince's helpless condition has incidentally given an impetus to wireless telegraphy. Queen Victoria, in her anxiety to know the daily condition of her crippled son, has caused one of Marconi's electric instruments of this sort to be set up in Osborne Palace.

A corresponding device is in position on the royal yacht Osborne, on which the Prince has been cruising in the Channel. By this means daily messages are exchanged between distinguished mother and son in a way that a few years ago would have been thought miraculous.

Reclining on a padded couch in the pavilion, the Prince was able to watch the

yacht races at Cowes almost as well as forward.

By this device the knee may be bent backward in the usual way in walking, and when the time comes for it to be put forward in walking the springs will bring the lower leg forward without the slightest muscular effort.

The Prince of Wales has not made much progress in using these mock muscles so far. One attempt a week ago at walking showed that the ligaments of the leg were still too weak to exercise.

To complete the apparatus the two circular pads for holding the parts of the fractured knee pan in position. The lower pad is fastened to the rods by one set of straps. The upper pad is held in position by two sets of straps.

When the portions of the patella, or knee pan, have grown together sufficiently which is hoped for in a few weeks, the patient will begin to walk with a cane. Then the locked joint will be released five degrees at a time every few days until the complete right angle of normal movement is attained.

Then the tension of the mock muscles, or springs, will be loosened little by little and the natural muscles allowed to work the knee pan and its ligaments until they can do so at full strength.

Finally the lower pad will be removed, while the upper one will be slightly loosened but left in position for a few weeks longer, after which the whole apparatus may be discarded.

TO HUNT FOR GOLD IN THE PHILIPPINES.

THE United States Geological Survey has sent Dr. George F. Becker, the famous expert in mines, to the Philippines for the purpose of investigating the deposits of precious metals which promise to make those islands a tropical Klondike in the near future. It is confidently predicted, indeed, by persons well acquainted with the conditions, that the gold fields of the archipelago will rival those of Alaska and South Africa.

All the streams on the eastern side of Luzon carry gold down from the mountains, and no brook finds its way into the Pacific Ocean whose sand and gravel do not pan at least a yellow color. Even now very little is known about the geology of the Philippines, and their mineral resources are wholly undeveloped.

The vegetation of the islands is so dense that ordinary prospecting is out of the question. In other words, individuals can accomplish very little in the way of exploring and locating valuable deposits. However, Uncle Sam is behind this enterprise, and he has plenty of money to spend on it.

From the earliest times Spanish travellers have written about the latent golden wealth of the archipelago, but the Dons have never had the enterprise and industry to develop it. When they first landed on the islands they found gold an article of traffic among the natives. Just as it is now. In Pizarro's "Diary of Magellan's Voyages" the natives are described as wearing golden ornaments, and as offering to present a bar of the metal to the commander of the naval expedition. A still extant Chinese book, dated in the third century A. D., describes a trading voyage from Amoy to Manila, and mentions gold as the chief product of Luzon.

Nowadays, outside of the large towns in the Philippines, the traffic in gold is very extensive, that metal being, in fact, the principal medium of exchange. It is weighed in small scales, its value being estimated at about \$11 an ounce usually, though in smaller quantities it brings only \$10. Owing to its impurity it is not worth much more. Gold hunting is practised by the natives in a desultory fashion, when an overdue tax or an approaching holiday with its cock fights makes the possession of a few dollars in cash more than usually desirable.

It is known that there is a great deal of gold in the province of Benguet, Central Luzon, and also in Northeastern Surigao, on the island of Mindanao. The streams in Surigao are particularly rich.

One reason why so little is known of the gold of the Philippines is that there has never been any official control of the output, or any tax upon it. The miners mostly live in isolated districts, and communication between villages is rare. The universal man of business is the omnipresent Chinaman, perambulating pedler or storekeeper with fixed abode, who penetrates the distant settlements, buys gold with his wares and sends it out of the country to Hong Kong, Amoy, or elsewhere. His business is to keep the extent and volume of his trade a secret.

Farouls gold dust is well known in



MECHANISM FOR HOLDING BONES AND LIGAMENTS IN POSITION.

The Prince and Princess of Wales Watching the Cowes Yacht Races on Board the Royal Yacht Osborne.

(Drawn from Life for the London Graphic by Special Artist Sydney P. Hall.)

gathering to repair the waste, swells and presses upon the roots of the nerves in the brain, irritating the pneumogastric nerve, which convulses the stomach and creates seasickness. It is not necessary to be upon the sea to get seasick, however.

When the spinal cord is attacked it convulses the irritation to its branches and the abdominal muscles in turn contract. Then there is trouble that cannot be stayed, and you are seasick unto death. When the stomach is assailed independently the pneumogastric nerve plays its part and handles the job just the same. There is no possible way to miss the riot when once you find it getting possession of you.

The only way to escape seasickness is to keep the blood away from the nerve centres, where it congests, and then makes a requisition upon the pneumogastric nerve to tangle up your interior organism. A small rubber ice-bag placed next to the spinal column and worn under the clothing will do wonders toward preventing seasickness. If you can't get that, lie as nearly as possible in the centre of the ship. Plenty of ice water will help you, and another mild relief is to wrap a towel tightly around the abdomen or clutch up your yawning belt.

When you first feel it coming on, eat a few pieces of lump sugar containing a drop of chloroform. Baked apples are good for some people. But as a rule you never want to see food again as long as you live.

It has been found that deaf mutes are never seasick, and also that people deaf in one ear are not likely to be affected. This is so because the semi-circular canals on the inner ear are so affected that they operate upon the brain and affect one's sense of position.

Some people never get seasick under any circumstances. Other fall victims to it at the merest suggestion of motion, whether they actually experience it or view it from a distance. Cases have been known where a man would look at the waves from a pier and in a short time become as seasick as one who had been pitched around in the billows off the Maine coast.

Persons with a good heart and regular circulation and pulse are not as liable to seasickness as irritable and emotional persons. The French and Italians, being sensitive and excitable people, will convert a transatlantic liner into a hospital ship inside of two hours off land. They get seasick in droves, and half of them make wills before the first day is over.

One good thing about seasickness is that when its effects have gone you can eat heartily and enjoy your food immensely.

The best possible preventive is to stay on land.

ONLY WOMAN WHO ALWAYS WEARS SANDALS.

THIS dainty co-medienne has a pair of feet that are an artist's dream, and to preserve their perfect form she wears sandals like a Grecian maid.

Hattie Schell, of the Pacheco Company, is the daughter of an artist, the late Joseph S. Schell, the landscape painter. He was always very proud of the beautiful form of his child, and when she was an infant declared she should never wear either stays or shoes.

She has lived up to her father's ideas, and the only time when she ever puts on a conventional stiff shoe is when costuming for the stage.

On the streets she always wears sandals. To see her tripping along with the springing step of a fairy, her little feet peeping from beneath the skirts in their dainty and novel attire, one wonders at first why all women do not do likewise. But then all women have not such feet as she.



MISS HATTIE SCHELL AND HER GRECIAN SANDAL.

THE BONES OF BUDDHA FOUND IN ANCIENT INDIA.

FROM India comes the news of remarkable discoveries. The very bones of Buddha have been found, strangely paralleling the discovery of the tombs of the gods in Egypt.

Buddha has been compared with Woden,

of the Scandinavian, and Thoth, of the Egyptian mythology by some great Oriental scholars such as Professor H. H. Wilson, who have doubted the reality of his life. But now Professor Vincent Smith, a learned antiquary of Bengal, has found the very home of Buddha and some of his bones.

It is a current tradition that Buddha was the son of Suddhodana, King of Kapilavastu, in Nepal, India. This city has at last been definitely located; its ruins have been laid bare. Buddha lived and worked in the sixth century B. C., and Kapilavastu has been unoccupied since 410 B. C. Its ruins are now being excavated, bringing to light buildings more ancient than any others which have been found in India.

Tradition stated that Buddha was born in the Lumbini Garden, and this very spot has been found, having been identified by a pillar erected in the third century B. C. by the Emperor Asoka, the Constantine of Buddhism. The inscription on the pillar is still perfect. It stands on the western edge of a mound of ruins about a hundred yards in diameter, and on the south side of the mound is the tank in which the child's mother bathed after his birth.

But the most startling of this chain of discoveries was made in a stupa, or brick tumulus, close to the British frontier—the relics of Buddha himself. These consist of fragments of bone, which were deposited in a wooden vessel that stood at the bottom of a massive coffer, more than four feet long and two feet deep, cut out of a solid block of fine sandstone. This coffer was buried under eighteen feet of masonry, composed of huge bricks, each 16 inches long.

The wooden vessel was decayed, and with it was an exquisitely finished bowl of rock crystal, the largest yet discovered in India, together with five small vases of soapstone. All these vessels were partially filled, evidently in honor of the relics, with a marvellous collection of gold stars, pearls, topazes, beryls and other jewels and of various objects delicately wrought in crystal, agate and other substances.

An inscription on one of the soapstone vases declared the relics to be those of Buddha himself, and the very characters in which this inscription is written are substantially the same as those of the Asoka inscriptions, and indicate that the tumulus, or "stupa," was constructed between 300 and 250 B. C. These discoveries substantiate in every respect the oldest traditions as to the birthplace and scene of the activity of Buddha, 2,400 years ago.

These discoveries will create a widespread sensation, not only among the Christian students of Buddhism, but also among the many hundred millions who worship Sakya Muni (Buddha). None can any longer doubt the actuality of that man whose strikingly noble and humane career has been frequently thought worthy of comparison with that of Jesus.

Buddha was an original thinker and teacher. So deeply conscious of the degrading tradition of caste and the priestly tyranny of the Brahmins, and profoundly impressed with the pathos and struggles of life, he sought earnestly for some method of escaping from existence and its accompanying sorrows.